

**ABSTRACT**

A brushless resolver (10) comprises exciting signal transmitting means for transmitting a resolver exciting signal from the stator (3) side to the rotor (4) side in a noncontact way and a resolver part (7) for modulating the resolver  
5 exciting signal according to the angle of rotation to be detected. The resolver part (7) also serves as exciting signal transmitting means. The resolver part (7) is constituted of a pair of a rotor (4) composed of a rotor iron core (43) having slots and wrapped with a rotor winding (44) and a stator (3) composed of a  
10 stator iron core (33) having slots and wrapped with a stator winding (34). The manufacturing cost can be lowered, and an arbitrary shaft multiple angle such as a shift multiple angle 1 can be set up.